



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/175,521	10/20/1998	PAUL STEPHAN BEDROSIAN	L0012/7000	7008
46363	7590	04/07/2006		
PATTERSON & SHERIDAN, LLP/ LUCENT TECHNOLOGIES, INC 595 SHREWSBURY AVENUE SHREWSBURY, NJ 07702			EXAMINER GLENN, KIMBERLY E	
			ART UNIT 2817	PAPER NUMBER

DATE MAILED: 04/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

57

Office Action Summary	Application No.	Applicant(s)	
	09/175,521	BEDROSIAN, PAUL STEPHAN	
	Examiner	Art Unit	
	Kimberly E. Glenn	2817	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 26-55 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 26-31, 33-41, 43-45 and 48-52 is/are rejected.
- 7) ☒ Claim(s) 32, 42, 46, 47 and 53-55 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

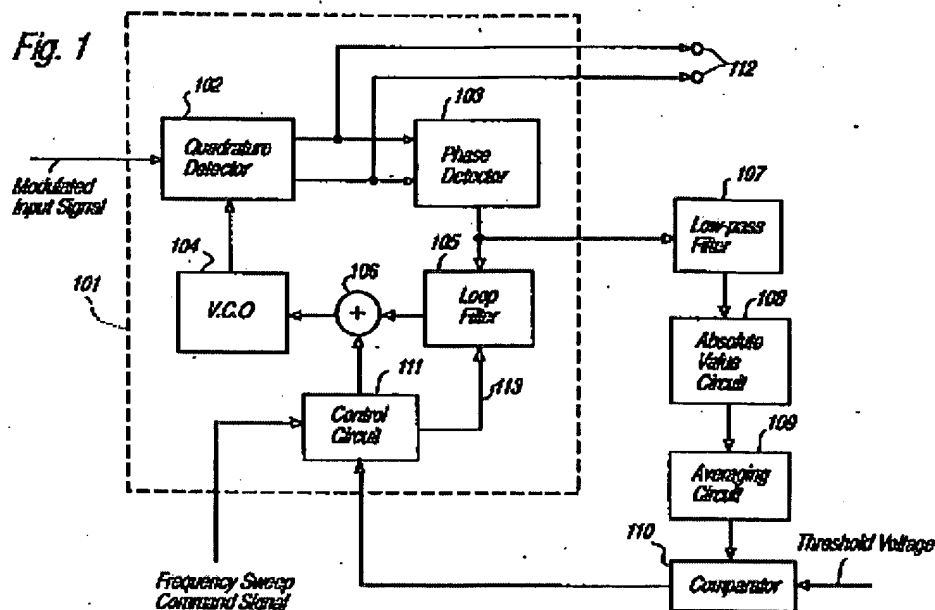
The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 26-31, 33-41, 43-45 and 48-52 are rejected under 35 U.S.C. 102(b) as being anticipated by Otani et al US Patent 4,853,642.

Otani et al a phase controlled demodulator comprising: an oscillator 104 responsive to a control signal by producing a PLL output signal; a phase comparator 103 responsive to a PLL input signal and the PLL output signal by detecting the phase difference between the two signals and producing the control signal indicative of that difference, the control signal being coupled to the oscillator; and control circuitry (107 108 109 110 111) responsive to deviations of the PLL input signal's frequency outside a predetermined input frequency range by forcing the frequency of the PLL output to a predetermined frequency, the control circuitry including beat frequency circuitry that detects deviations of the input frequency outside the predetermined input-frequency range. The method steps to the above apparatus are inherent.



Otani et al state in column 3 ; lines 29-68:

The frequency range of the low-pass filter 107 is narrower than the phase lock range of the demodulator 101. If there is a large frequency deviation, the frequency of the output of phase detector 103 goes higher than the cutoff frequency of the low-pass filter 107, and so most of the frequency components of the phase difference signal is cut off by the low-pass filter 107 and noise prevails at the input of the absolute value circuit 108 as indicated by a waveform 120 in FIG. 3. As the frequency deviation decreases, the phase detector output decreases and a beat frequency signal as indicated by a waveform 121 appears at the output of low-pass filter 107. It is seen that the beat frequency signal has a much higher amplitude than the amplitude of the noise.

After having been processed by the absolute value circuit 108, the beat frequency signal appears as indicated by a waveform 130 in FIG. 4, while the noise appears as indicated by an a waveform 121. By averaging operation, the output of absolute value circuit 108 is converted to a DC voltage which is compared by the comparator 110 with the threshold voltage. Comparator 110 produces a logic 1 when the input DC voltage is higher than the threshold. Therefore, during an out-of-sync condition, the comparator 110 output is at logic 0 which causes the control circuit 111 to apply a disabling signal to loop filter 105 to cause it to terminate the application of its output to adder 106 and the control circuit 111 is supplied with a frequency sweep command signal. As the frequency sweep continues (forcing the frequency to predetermined range) , the comparator output will eventually switch to logic 1 when the demodulator is approaching the boundary of the phase lock range.

When supplied with a logic 1 from the comparator 110, control circuit 111 removes the disabling signal from lead 113 and terminates the application of the sweeping voltage to adder 106. Therefore, the demodulator can be quickly pulled into the phase locked state as soon as the frequency deviation crosses the boundary of the phase lock range.

Response to Arguments

Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Balzano US Patent 4,757,279, Ogino et al US Patent 5,053,724 and Lo et al US Patent 5,703,538.

Response to Amendment

Claims 32, 42, 46, 47 and 53-55 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimberly E. Glenn whose telephone number is (571)-272-1761. The examiner can normally be reached on Monday-Friday 7:30 to 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pascal can be reached on (571)-272-1769. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kimberly E Glenn

Application/Control Number: 09/175,521

Page 6

Art Unit: 2817

3/31/06 keg

Examiner
Art Unit 2817

A handwritten signature in black ink, appearing to read "Robert Pascal", with a long horizontal flourish extending to the right.

Robert Pascal
Supervisory Patent Examiner
Technology Center 2800